



INFORMATION CITED BY APPLICANTS THAT MAY BE
MATERIAL TO THE PROSECUTION OF THE SUBJECT APPLICATION

Applicants: R.T. Moon et al. Attorney Docket No. UWOTL121818
 Application No.: 10/679,191 Group Art Unit: 1645
 Filed: October 3, 2003
 Title: TRANSGENIC FISH AND BETA-CATENIN
 SIGNALING PATHWAY MODEL

U.S. PATENT DOCUMENTS

*Examiner Cite Initials No.	Document No.	Kind Code	Date (mm/dd/yyyy)	Name
DS U1	5,223,409	A	06/29/1993	Ladner et al.

FOREIGN PATENT DOCUMENTS

None.

OTHER INFORMATION

(Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Cite Initial No.	
DS	
O1	Allen, N.D., et al., "Transgenes as Probes for Active Chromosomal Domains in Mouse Development," <i>Nature</i> 333(6176):852-855, June 30, 1988.
O2	Amsterdam, A., and N. Hopkins, "Retrovirus-Mediated Insertional Mutagenesis in Zebrafish," <i>Methods in Cell Biol.</i> 60:87-98, 1999.
O3	Bernhardt, R.R., et al, "Identification of Spinal Neurons in the Embryonic and Larval Zebrafish," <i>J. Comp. Neurol.</i> 302:603-616, 1990.
O4	Billin, A.N., et al., " β -Catenin-Histone Deacetylase Interactions Regulate the Transition of LEF1 From a Transcriptional Repressor to an Activator," <i>Mol. Cell. Biol.</i> 20(18):6882-6890, September 2000.
O5	Perrimon, N., and M. Boutros, " <i>Drosophila</i> Wnt/Fz Pathways," <i>Science's STKE</i> (Connections Map, as seen in May 2002). < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_6459 >
DS	
O6	Bowerman, B., " <i>C. elegans</i> T Cell Polarity Wnt Pathway," <i>Science's STKE</i> (Connections Map, as seen March 2004), at least as early as May 2002. < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_10440 >

LAW OFFICES OF
 CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{LLC}
 1420 Fifth Avenue
 Suite 2800
 Seattle, Washington 98101
 206.682.8100

*Examiner Initial	Cite No.
DS	O7 Bowerman, B., "C. elegans Gonadogenesis Wnt Pathway," <i>Science's STKE</i> (Connections Map, as seen March 2004), at least as early as May 2002. < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_10698 >
	O8 Bowerman, B., "C. elegans Endoderm Induction Wnt Pathway," <i>Science's STKE</i> (Connections Map, as seen March 2004), at least as early as May 2002. < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_6104 >
	O9 Bowerman, B., "C. elegans QL Neuroblast Migration Wnt Pathway," <i>Science's STKE</i> (Connections Map, as seen March 2004), at least as early as May 2002. < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_9763 >
	O10 Brannon, M., et al., "XCtBP is a XTcf-3 Co-Repressor With Roles Throughout <i>Xenopus</i> Development," <i>Development</i> 126:3159-3170, 1999.
	O11 Brannon, M., et al., "A β -Catenin/XTcf-3 Complex Binds to the <i>Siamois</i> Promoter to Regulate Dorsal Axis Specification in <i>Xenopus</i> ," <i>Genes Dev.</i> 11:2359-2370, 1997.
	O12 Bunin, B.A., and J.A. Ellman, "A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives," <i>J. Am. Chem. Soc.</i> 114:10997-10998, December 1992.
	O13 Burgess, S., and N. Hopkins, "Use of Pseudotyped Retroviruses in Zebrafish as Genetic Tags," <i>Methods Enzymol.</i> 327:145-161, 2000.
	O14 Carell, T., et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules," <i>Angew. Chem Int. Ed. Engl.</i> 33(20):2059-2061, 1994.
	O15 Carell, T., et al., "A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of Molecules," <i>Angew. Chem. Int. Ed. Engl.</i> 33(20):2061-2064, 1994.
	O16 Christian, J.L., et al., "Xwnt-8, a <i>Xenopus Wnt-1/int-1</i> -Related Gene Responsive to Mesoderm-Inducing Growth Factors, May Play a Role in Ventral Mesodermal Patterning During Embryogenesis," <i>Development</i> 111:1045-1055, 1991.
DS	O17 Cho, C.Y., et al., "An Unnatural Biopolymer," <i>Science</i> 261:1303-1305, September 3, 1993. < http://links.jstor.org/sici?sici=0036-8075%2819930903%3A261%3A5126%3C1303%3AAUB%3E2.0.CO%3B2-5 >

*Examiner Cite
Initial No.

DS	Cite No.
	O18 Cull, M.G., et al., "Screening for Receptor Ligands Using Large Libraries of Peptides Linked to the C Terminus of the lac Repressor," <i>Proc. Natl. Acad. Sci. USA</i> 89(5):1865-1869, March 1, 1992. << http://links.jstor.org/sici?sici=0027-8424%2819920301%2989%3A5%3C1865%3ASFRLUL%3E2.0.CO%3B2-2 >>
	O19 Culp, P., et al., "High-Frequency Germ-Line Transmission of Plasmid DNA Sequences Injected Into Fertilized Zebrafish Eggs," <i>Proc. Natl. Acad. Sci. USA</i> 88(18):7953-7957, September 15, 1991. << http://links.jstor.org/sici?sici=0027-8424%2819910915%2988%3A18%3C7953%3AHGTOPD%3E2.0.CO%3B2-T >>
	O20 Cwirla, S.E., et al., <i>Proc. Natl. Acad. Sci. USA</i> 87(16):6378-6382, August 1990. << http://links.jstor.org/sici?sici=0027-8424%28199008%2987%3A16%3C6378%3APOPAVL%3E2.0.CO%3B2-3 >>
	O21 Devlin, J.J., et al., "Random Peptide Libraries: A Source of Specific Protein Binding Molecules," <i>Science</i> 249(4967):404-406, July 27, 1990. << http://links.jstor.org/sici?sici=0036-8075%2819900727%293%3A249%3A4967%3C404%3ARPLASO%3E2.0.CO%3B2-4 >>
	O22 DeWitt, S.H., et al., "'Diversomers': An Approach to Nonpeptide, Nonoligomeric Chemical Diversity," <i>Proc. Natl. Acad. Sci. USA</i> 90(15):6909-6913, August 1, 1993. << http://links.jstor.org/sici?sici=0027-8424%2819930801%2990%3A15%3C6909%3A%22AATNN%3E2.0.CO%3B2-3 >>
	O23 Dickinson, M.E., et al., "Dorsalization of the Neural Tube by the Non-Neural Ectoderm," <i>Development</i> 121:2099-2106, 1995.
	O24 Dorsky, R.I., et al., "Control of Neural Crest Cell Fate by the Wnt Signalling Pathway," <i>Nature</i> 396:370-373, November 26, 1998.
	O25 Dorsky, R.I., et al., "Maternal and Embryonic Expression of Zebrafish <i>lefl</i> ," <i>Mech. Dev.</i> 86:147-150, 1999.
	O26 Dorsky, R.I., et al., "Direct Regulation of <i>Nacre</i> , a Zebrafish <i>MITF</i> Homolog Required for Pigment Cell Formation, by the Wnt Pathway," <i>Genes Dev.</i> 14:158-162, 2000.
	O27 Driever, W., et al., "A Genetic Screen for Mutations Affecting Embryogenesis in Zebrafish," <i>Development</i> 123:37-46, 1996.
DS	O28 Eastman, Q., and R. Grosschedl, "Regulation of LEF-1/TCF Transcription Factors by Wnt and Other Signals," <i>Curr. Opin. Cell Biol.</i> 11:233-240, 1999.

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESSSM
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100

*Examiner Initial	Cite No.
DS	
	O29 Erb, E., et al., "Recursive Deconvolution of Combinatorial Chemical Libraries," <i>Proc. Natl. Acad. Sci. USA</i> 91(24):11422-11426, November 22, 1994. << http://links.jstor.org/sici?sici=0027-8424%2819941122%2991%3A24%3C11422%3ARDOCCL%3E2.0.CO%3B-2-L >
	O30 Felici, F., et al., "Selection of Antibody Ligands From a Large Library of Oligopeptides Expressed on a Multivalent Exposition Vector," <i>J. Mol. Biol.</i> 222:301-310, 1991.
	O31 Fodor, S.P.A., et al., "Multiplexed Biochemical Assays With Biological Chips," <i>Nature</i> 364:555-556, August 5, 1993.
	O32 Galceran, J., et al., " <i>Wnt3a</i> ^{-/-} -Like Phenotype and Limb Deficiency in <i>Lef1</i> ^{-/-} <i>Tcf1</i> ^{-/-} Mice," <i>Genes Dev.</i> 13:709-717, 1999.
	O33 Gallop, M.A., et al., "Applications of Combinatorial Technologies to Drug Discovery," <i>J. Med. Chem.</i> 37(9):1233-1251, April 29, 1994.
	O34 Golling, G., et al., "Insertional Mutagenesis in Zebrafish Rapidly Identifies Genes Essential for Early Vertebrate Development," <i>Nat. Genet.</i> 31:135-140, June 2002.
	O35 Gong, Y., et al., "LDL Receptor-Related Protein 5 (LRP5) Affects Bone Accrual and Eye Development," <i>Cell</i> 107:513-523, November 16, 2001.
	O36 Gossler, A., et al., "Mouse Embryonic Stem Cells and Reporter Constructs to Detect Developmentally Regulated Genes," <i>Science</i> , New Series, 244(4903):463-465, April 28, 1989. << http://links.jstor.org/sici?sici=0036-8075%2819890428%293%3A244%3A4903%3C463%3AMESCAR%3E2.0.CO%3B2-1 >
	O37 Haffter, P., et al., "The Identification of Genes With Unique and Essential Functions in the Development of the Zebrafish, <i>Danio rerio</i> ," <i>Development</i> 123:1-36, 1996.
	O38 Halloran, M.C., et al., "Laser-Induced Gene Expression in Specific Cells of Transgenic Zebrafish," <i>Development</i> 127:1953-1960, 2000.
	O39 Heasman, J., et al., "Overexpression of Cadherins and Underexpression of β -Catenin Inhibit Dorsal Mesoderm Induction in Early <i>Xenopus</i> Embryos," <i>Cell</i> 79:791-803, December 2, 1994.
DS	
	O40 Heikkilä, M., et al., " <i>Wnts</i> and the Female Reproductive System," <i>J. Exp. Zool.</i> 290:616-623, 2001.

*Examiner Initial	Cite No.
DS	
	O41 Hinck, L., et al., "Wnt-1 Modulates Cell-Cell Adhesion in Mammalian Cells by Stabilizing β -Catenin Binding to the Cell Adhesion Protein Cadherin," <i>J. Cell Biol.</i> 124(5):729-741, 1994.
	O42 Hollyday, M., et al., "Wnt Expression Patterns in Chick Embryo Nervous System," <i>Mech. Dev.</i> 52:9-25, 1995.
	O43 Horwell, D., et al., " 'Targeted' Molecular Diversity: Design and Development of Non-Peptide Antagonists for Cholecystokinin and Tachykinin Receptors," <i>Immunopharmacol.</i> 33:68-72, 1996.
	O44 Houghten, R.A., et al., "The Use of Synthetic Peptide Combinatorial Libraries for the Identification of Bioactive Peptides," <i>BioTechniques</i> 13(3):412-421, September 1992.
	O45 Hug, B., et al., " <i>tbx6</i> , a <i>Brachyury</i> -Related Gene Expressed by Ventral Mesendodermal Precursors in the Zebrafish Embryo," <i>Dev. Biol.</i> 183:61-73, 1997.
	O46 Ikeya, M., et al., "Wnt Signalling Required for Expansion of Neural Crest and CNS Progenitors," <i>Nature</i> 389:966-970, October 30, 1997.
	O47 Imai, Y., et al., "Analysis of Chromosomal Rearrangements Induced by Postmeiotic Mutagenesis With Ethylnitrosourea in Zebrafish," <i>Genetics</i> 155:261-272, May 2000.
	O48 Inoue, K., et al., "Electroporation as a New Technique for Producing Transgenic Fish," <i>Cell. Differ. Develop.</i> 29(2):123-128, 1990.
	O49 Ishikawa, T., et al., "Mouse Wnt Receptor Gene <i>Fzd5</i> is Essential for Yolk Sac and Placental Angiogenesis," <i>Development</i> 128:25-33, 2001.
	O50 Kelly, C., et al., "Maternally Controlled β -Catenin-Mediated Signaling is Required for Organizer Formation in the Zebrafish," <i>Development</i> 127:3899-3911, 2000.
	O51 Kim, C.-H., et al., "Repressor Activity of Headless/Tcf3 is Essential for Vertebrate Head Formation," <i>Nature</i> 407:913-916, October 19, 2000.
	O52 Kimmel, C.B., "Genetics and Early Development of Zebrafish," <i>Trends Genet.</i> 5(8):283-288, August 1989.
DS	O53 Korinek, V., et al., "Constitutive Transcriptional Activation by a β -Catenin-Tcf Complex in APC ^{-/-} Colon Carcinoma," <i>Science, New Series</i> , 275(5307):1784-1787, March 21, 1997.

*Examiner Initial	Cite No.
DS	O54 Kothary, R., et al., "A Transgene Containing <i>lacZ</i> Inserted Into the <i>Dystonia</i> Locus is Expressed in Neural Tube," <i>Nature</i> 335:435-437, September 29, 1988.
	O55 Krauss, S., et al., "Expression of the Zebrafish Paired box Gene <i>pax[zf-b]</i> During Early Neurogenesis," <i>Development</i> 113:1193-1206, 1991.
	O56 Lam, K.S., "Application of Combinatorial Library Methods in Cancer Research and Drug Discovery," <i>Anti-Cancer Drug Des.</i> 12:145-167, 1997.
	O57 Lam, K.S., et al., "A new Type of Synthetic Peptide Library for Identifying Ligand-Binding Activity," <i>Nature</i> 354:82-84, November 7, 1991.
	O58 Lekven, A.C., et al., "Zebrafish <i>wnt8</i> Encodes Two Wnt8 Proteins on a Bicistronic Transcript and is Required for Mesoderm and Neurectoderm Patterning," <i>Dev. Cell</i> 1:103-114, July 2001.
	O59 Little, R.D., et al., "A Mutation in the LDL Receptor-Related Protein 5 Gene Results in the Autosomal Dominant High-Bone-Mass Trait," <i>Am. J. Hum. Genet.</i> 70:11-19, 2002.
	O60 Liu, J., et al., "Siah-1 Mediates a Novel β -Catenin Degradation Pathway Linking p53 to the Adenomatous Polyposis Coli Protein," <i>Mol. Cell</i> 7:927-936, May 2001.
	O61 Martin, G., "Making a Vertebrate Limb: New Players Enter From the Wings," <i>BioEssays</i> 23:865-868, 2001.
	O62 Matsuzawa, S.-I., and J.C. Reed, "Siah-1, SIP, and Ebi Collaborate in a Novel Pathway for β -Catenin Degradation Linked to p53 Responses," <i>Mol. Cell</i> 7:915-926, 2001.
	O63 McMahon, A P., and A. Bradley, "The <i>Wnt-1</i> (<i>int-1</i>) Proto-Oncogene is Required for Development of a Large Region of the Mouse Brain," <i>Cell</i> 62:1073-1085, September 21, 1990.
	O64 Megason, S.G. and A.P. McMahon, "A Mitogen Gradient of Dorsal Midline Wnts Organizes Growth in the CNS," <i>Development</i> 129:2087-2098, 2002.
	O65 Moon, R.T., "Wnt/Beta-Catenin Pathway," <i>Science's STKE</i> (Connections Map, as seen in March 2004), at least as early as May 2002. < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_5533 >
DS	O66 Moon, R.T., " <i>Xenopus</i> Egg Wnt/Beta-Catenin Pathway," <i>Science's STKE</i> (Connections Map, as seen March 2004), at least as early as May 2002. < http://stke.sciencemag.org/cgi/cm/stkecm;CMP_6031 >

*Examiner Initial	Cite No.
DS	
	O67 Moon, R.T., et al., "The Promise and Perils of Wnt Signaling Through β -Catenin," <i>Science</i> 296:1644-1646, 2002.
	O68 Müller, F., et al., "Introducing Foreign Genes into Fish Eggs With Electroporated Sperm as a Carrier," <i>Mol. Mar. Biol. Biotechnol.</i> 1(4/5):276-281, 1992.
	O69 Müller, F., et al., "Efficient Transient Expression System Based on Square Pulse Electroporation and <i>in vivo</i> Luciferase Assay of Fertilized Fish Eggs," <i>FEBS Letters</i> 324(1):27-32, June 1993.
	O70 Murakami, Y., et al., "Micromachined Electroporation System for Transgenic Fish," <i>J. Biotechnol.</i> 34:35-42, 1994.
	O71 Novak, A., et al., "Cell Adhesion and the Integrin-Linked Kinase Regulate the LEF-1 and β -Catenin Signaling Pathways," <i>Proc. Natl. Acad. Sci. USA</i> 95(8):4374-4379, April 14, 1998. << http://links.jstor.org/sici?sici=0027-8424%2819980414%2995%3A8%3C4374%3ACAAATIK%3E2.0.CO%3B2-O >
	O72 O'Kane, C.J., and W.J. Gehring, "Detection <i>in situ</i> of Genomic Regulatory Elements in <i>Drosophila</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 84(24):9123-9127, December 15, 1987. << http://links.jstor.org/sici?sici=0027-8424%2819871215%2984%3A24%3C9123%3ADISOG%3E2.0.CO%3B2-O >
	O73 Oxtoby, E., and T. Jowett, "Cloning of the Zebrafish <i>krox-20</i> Gene (<i>krx-20</i>) and its Expression During Hindbrain Development," <i>Nucleic Acids Res.</i> 21(5):1087-1095, 1993.
	O74 Pelegri, F., and H.-M. Maischein, "Function of Zebrafish β -Catenin and TCF-3 in Dorsoventral Patterning," <i>Mech. Dev.</i> 77:63-74, 1998.
	O75 Polakis, P., "Wnt Signaling and Cancer," <i>Genes Dev.</i> 14:1837-1851, 2000.
	O76 Riley, B.B., and D.J. Grunwald, "Efficient Induction of Point Mutations Allowing Recovery of Specific Locus Mutations in Zebrafish," <i>Proc. Natl. Acad. Sci. USA</i> 92:5997-6001, June 1995.
	O77 Roose, J., et al., "The <i>Xenopus</i> Wnt Effector XTcf-3 Interacts With Groucho-Related Transcriptional Repressors," <i>Nature</i> 395:608-612, October 8, 1998.
DS	
	O78 Ross, S.E., et al., "Inhibition of Adipogenesis by Wnt Signaling," <i>Science</i> 289:950-953, August 11, 2000.

*Examiner Initial	Cite No.
DS	
	O79 Ryu, S.-L., et al., "Regulation of <i>dharma/bozozok</i> by the Wnt Pathway," <i>Dev. Biol.</i> 231:397-409, 2001.
	O80 Schneider, S., et al., " β -Catenin Translocation Into Nuclei Demarcates the Dorsalizing Centers in Frog and Fish Embryos," <i>Mech. Dev.</i> 57:191-198, 1996.
	O81 Scott, J.K., and G.P. Smith, "Searching for Peptide Ligands With an Epitope Library," <i>Science</i> , New Series, 249(4967):386-390, July 27, 1990. << http://links.jstor.org/sici?sici=0036-8075%2819900727%293%3A249%3A4967%3C386%3ASFPLWA%3E2.0.CO%3B2-9 >>
	O82 Sharpe, C., et al., "Wnt Signalling: A Theme With Nuclear Variations," <i>BioEssays</i> 23:311-318, 2001.
	O83 Streisinger, G., "Attainment of Minimal Biological Variability and Measurements of Genotoxicity: Production of Homozygous Diploid Zebra Fish," <i>Natl. Cancer Inst. Monogr.</i> 65, NIH Publication No. 84-2653, Bethesda, Maryland, 1984, pp. 53-58.
	O84 Symonds, J.E., et al., "Electroporation of Salmon Sperm With Plasmid DNA: Evidence of Enhanced Sperm/DNA Association," <i>Aquaculture</i> 119(11):313-327, 1994.
	O85 Szelei, J., et al., "Liposome-Mediated Gene Transfer in Fish Embryos," <i>Transgenic Res.</i> 3(2):116-119, March 1994.
	O86 Taipale, J., and P.A. Beachy, "The Hedgehog and Wnt Signalling Pathways in Cancer," <i>Nature</i> 411:349-354, May 17, 2001.
	O87 Takada, S., et al., " <i>Wnt-3a</i> Regulates Somite and Tailbud Formation in the Mouse Embryo," <i>Genes Dev.</i> 8:174-189, January 1994.
	O88 Turner, D.L., and H. Weintraub, "Expression of Achaete-Scute Homolog 3 in <i>Xenopus</i> Embryos Converts Ectodermal Cells to a Neural Fate," <i>Genes Dev.</i> 8:1434-1447, June 1994.
	O89 Waterman, M.L., et al., "A Thymus-Specific Member of the HMG Protein Family Regulates the Human T Cell Receptor α Enhancer," <i>Genes Dev.</i> 5:656-669, April 1991.
DS	
	O90 Widlund, H.R., et al., " β -Catenin-Induced Melanoma Growth Requires the Downstream Target <i>Microphthalmia</i> -Associated Transcription Factor," <i>J. Cell Biol.</i> 158:1079-1087, November 6, 2002.

*Examiner Initial	Cite No.
DS	O91 Wilkinson, D.G., et al., "Expression of the Proto-Oncogene <i>int-1</i> is Restricted to Specific Neural Cells in the Developing Mouse Embryo," <i>Cell</i> 50:79-88, July 3, 1987.
	O92 Wright, M., et al., "Identification of a <i>Wnt</i> -Responsive Signal Transduction Pathway in Primary Endothelial Cells," <i>Biochem. Biophys. Res. Commun.</i> 263(2):384-388, 1999.
	O93 Zelenin, A.V., et al., "The Delivery of Foreign Genes Into Fertilized Fish Eggs Using High-Velocity Microprojectiles," <i>FEBS Letters</i> 287(1/2):118-120, August 1991.
DS	O94 Zuckermann, R.N., et al., "Discovery of Nanomolar Ligands for 7-Transmembrane G-Protein-Coupled Receptors From a Diverse <i>N</i> -(Substituted)Glycine Peptoid Library," <i>J. Med. Chem.</i> 37(17):2678-2685, 1994.

Examiner

/Daniel Sullivan/

Date Considered

09/19/2006

*Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

BFM:jlj/mgp